

Title (en)
DIRECT FUEL-INJECTION ENGINE

Title (de)
DIREKTEINSPRITZMOTOR

Title (fr)
MOTEUR À INJECTION DIRECTE DE CARBURANT

Publication
EP 2133535 B1 20111019 (EN)

Application
EP 08739817 A 20080403

Priority

- JP 2008056710 W 20080403
- JP 2007100644 A 20070406
- JP 2007100645 A 20070406

Abstract (en)
[origin: EP2133535A1] In a cross section in which squish flow from an outer peripheral part of a piston (13) toward a cavity (25) is large due to a width (W2) of a squish area (SA) being large and a squish clearance (C2) being small, a collision angle (± 2) at which a fuel injection axis (L2) collides with the cavity (25) is made large, whereas in a cross section in which squish flow is small due to the width of the squish area (SA) being small and the squish clearance being large, the collision angle at which a fuel injection axis collides with the cavity (25) is made small. This enables a tendency for fuel to flow out to the exterior of the cavity (25) in a cross section where the squish flow is small to be wakened, and a tendency for fuel to flow out to the exterior of the cavity (25) in a cross section where the squish flow is large to be strengthened, thereby making the conditions in which fuel and air are mixed uniform throughout the entire region of the cavity (25).

IPC 8 full level
F02B 23/06 (2006.01); **F02B 23/00** (2006.01); **F02F 3/26** (2006.01)

CPC (source: EP US)
F02B 23/0621 (2013.01 - EP US); **F02B 23/0651** (2013.01 - EP US); **F02B 23/0669** (2013.01 - EP US); **F02B 23/0696** (2013.01 - EP US);
F02B 3/06 (2013.01 - EP US); **F02B 2275/14** (2013.01 - EP US); **F02B 2275/40** (2013.01 - EP US); **Y02T 10/12** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 2133535 A1 20091216; EP 2133535 A4 20100922; EP 2133535 B1 20111019; AT E529618 T1 20111115; US 2010108022 A1 20100506;
US 8474431 B2 20130702; WO 2008126771 A1 20081023

DOCDB simple family (application)
EP 08739817 A 20080403; AT 08739817 T 20080403; JP 2008056710 W 20080403; US 53298408 A 20080403